

## NOTES ON WEATHER IN OTHER PARTS OF THE WORLD.

*British Isles.*—Over by far the greater part of Great Britain a marked predominance of anticyclonic weather resulted in one of the warmest and driest Mays on record. In Ireland, where the conditions were influenced very frequently by cyclonic systems moving over the Atlantic, the weather was of a more normal character. The effect of warm air blowing over the cool sea surface was seen in a considerable prevalence of coastal fog. An absolute drought was experienced during the latter part of the month at many widely distributed stations. It was most marked in the Thames Valley, where no rain fell after the 11th except at a few stations where the drought was broken by slight precipitation on the 25th. The general rainfall expressed as a percentage of the average was: England and Wales, 41; Scotland, 41; Ireland, 120; British Isles, 62.

*France.*<sup>1</sup>—"Generally good weather; greatly improved crop prospects."

*Spain.*<sup>1</sup>—"Weather has not been altogether favorable for crops, the excessive rains causing some floods."

*Italy.*<sup>1</sup>—"A return of fine and warmer weather has favored crops."

*Germany.*<sup>1</sup>—"Weather has been fairly seasonable."

*Argentina.*—Weather continues fine and further progress has been made in the picking of the corn crop. Ploughing for the new crop of wheat has also been active under the favorable weather conditions, recent precipitation having put the soil in good condition.—*New York Ev. Post, May 23, 1919.*

<sup>1</sup> From Broomhall cabled report, *New York Ev. Post*, May 28, 1919.

## DETAILS OF WEATHER OF THE MONTH IN THE UNITED STATES.

## CYCLONES AND ANTICYCLONES.

By E. H. BOWIE, Supervising Forecaster.

During the month of May the forecaster dealt with eleven primary low-pressure areas, and of these four belonged to the Alberta type, four to the South Pacific type, and three unclassified, made their first appearance over southern Canada, east of the 90th meridian. Moreover there were five secondary low-pressure developments which became well-defined low-pressure areas. One of these formed over southern Arizona, one over Kansas, one over Wisconsin, one over North Carolina, and one off the New Jersey coast. The low-pressure areas followed no well-defined course, and their directions and speed of movements were markedly variable, except during the first decade of the month when their directions were toward the east-northeast and their speed of movement rapid. At other times their rates of progress were slow and their directions of progress erratic, from which it is inferred that the general eastward drift of the atmosphere was not at all uniform as to speed and direction.

There were eleven high-pressure areas charted during May, and of these one made its first appearance off the California coast, one off the north Pacific coast, four entered the United States from Canada west of the 100th meridian, and five appeared over southern Canada east of the 95th meridian. The two high-pressure areas that made their appearance off the Pacific coast preserved their identity, crossed the United States, and reached or passed off the south Atlantic coast, and the others passed eastward, north of latitude 40 and disappeared over the Atlantic Ocean.

## THE WEATHER ELEMENTS.

By P. C. Day, Climatologist and Chief of Division.

[Dated: Weather Bureau, Washington, July 1, 1919.]

## PRESSURE AND WINDS.

The distribution of the mean atmospheric pressure over the United States and Canada, and the prevailing direction of the winds for May, 1919, are graphically shown on Chart VII, while the means at the several stations, with the departures from the normal, are shown on Tables I and III.

The general atmospheric circulation was not marked by extremes of either high or low pressure, although

areas of moderately low pressure without well-defined movements formed at frequent intervals over the central and eastern districts. These favored much cloudiness and frequent local showers, heavy occasionally, but usually not sufficient to bring the total fall for the month greatly above the normal.

The average pressure for the month was below normal over all portions of the United States, save from the Central Plains northeastward to the Great Lakes, and locally in northern New England and the far Northwest, where the monthly averages were slightly higher than normal. In Canada the monthly pressure was below normal in the northwestern districts but slightly above to the northward of the Great Lakes and thence eastward to the Maritime Provinces.

The greatest negative departures were mainly in the southeastern districts, where locally the pressure readings were below 30 inches during nearly the entire second and third decades of the month. In Canada the negative departures were rather large in the western districts, increasing toward the north.

The general pressure distribution favored southerly winds in the Plains region and over much of the Atlantic and Gulf Coast States. In the Lake region and generally over the Ohio and Mississippi Valleys the winds were mostly from northerly points, while to the westward of the Rocky Mountains they assumed their usual variable courses, due frequently to the influence of local topography, although along the immediate Pacific coast they mainly had strong westerly components.

## TEMPERATURE.

The month opened with cool weather in the Great Plains and Rocky Mountain regions and generally moderate spring weather in other districts. Only slight temperature changes occurred until about the middle of the first decade, when there were sharp falls in the northern districts between the Rocky Mountains and the Great Lakes, due to high pressure moving eastward over Canada. This cool area advanced rapidly toward the Atlantic coast and frosts occurred generally over the more northern districts. Cool weather continued very generally over the central and northern districts east of the Rocky Mountains throughout the remainder of the first decade, and over most eastern districts, during the early part of the second decade. In portions of the Plateau region, however, the temperature had remained above normal continuously since the first of the month.